

What is claimed is:

- 1           1.       A washing machine comprising:  
2           leakage containment means for accumulating leaking water; and  
3           leakage detection means for detecting an accumulation of leaking water in said  
4           leakage containment means.
- 1           2.       The washing machine as claimed in claim 1, said leaking containment means  
2           comprising a cabinet having a plurality of sides and a bottom.
- 1           3.       The washing machine as claimed in claim 2, wherein said cabinet is formed  
2           by a plurality of connected side panels forming a bottom opening and a bottom panel having a  
3           perimeter, connected to a bottom edge of each connected side panel, for closing the bottom  
4           opening formed by the side panels.
- 1           4.       The washing machine as claimed in claim 3, wherein each of the plurality  
2           connected side panels comprises a bottom flange formed at the bottom edge of each side  
3           panel to be bent inward.
- 1           5.       The washing machine as claimed in claim 4, wherein the perimeter of the  
2           bottom panel rests atop the bottom flanges of the side panels and is secured to the side panels.
- 1           6.       The washing machine as claimed in claim 5, further comprising sealing  
2           means to seal the bottom panel to the side panels.

1           7.       The washing machine as claimed in claim 6, said sealing means comprising:  
2           compression means passing through the perimeter of the bottom panel and the bottom  
3           flanges; and  
4           a packing member inserted between the bottom flanges and the bottom panel and  
5           compressed by said compression means.

1           8.       The washing machine as claimed in claim 2, said leakage detection means  
2           comprising a switch activated by a predetermined level of accumulation of leaking water in  
3           said leakage containment means.

1           9.       The washing machine as claimed in claim 8, said leakage detection means  
2           further comprising:  
3           a switch support for supporting said switch at an upper end, connected at a lower end  
4           to an inner surface of the bottom of the cabinet, said support having an interior space of a  
5           predetermined height and having at least one perforation allowing water flow from said  
6           leakage containment means to the interior space of said switch support; and  
7           a float member having a predetermined buoyancy, disposed in the interior space of  
8           said switch support such that said float member is brought into contact with said switch by  
9           floating, to thereby activate said switch, if the accumulation of leaking water in said leakage  
10          containment means reaches the predetermined level.

1           10.      The washing machine as claimed in claim 9, wherein said switch is a tactile  
2           switch having a sensitivity allowing operation by the buoyancy of said float member.

1           11.     The washing machine as claimed in claim 9, said switch support comprising  
2     a switch mount for securely positioning said switch above said float member.

1           12.     The washing machine as claimed in claim 1, said leakage detection means  
2     outputting a leakage detection signal if the accumulation of leaking water in said leakage  
3     containment means reaches a predetermined level.

1           13.     The washing machine as claimed in claim 12, further comprising:  
2             a main inlet valve for supplying water to a tub;  
3             a microcomputer, receiving the leakage detection signal from said leakage detection  
4     means, for outputting at least one control signal to shut off said main inlet valve if the  
5     accumulation of leaking water in said leakage containment means reaches the predetermined  
6     level.

1           14.     The washing machine as claimed in claim 13, further comprising warning  
2     means, receiving the at least one control signal from said microcomputer, for informing the  
3     user of the status of the washing machine including an indication of the accumulation of  
4     leaking water in said leakage containment means reaching the predetermined level.

1           15.     A washing machine control method comprising steps of:  
2             supplying water to a tub;  
3             determining whether a water leakage condition exists; and  
4             shutting off the supply of water to the tub, if it is determined that a water leakage

5     condition exists.

1             16.     The method of claim 15, wherein the supply of water is controlled by a main  
2     inlet valve.

1             17.     The method of claim 15, further comprising a step of generating a sensed  
2     water leakage signal, if it is determined that a water leakage condition exists.

1             18.     The method of claim 15, further comprising a step of generating a warning  
2     signal, if it is determined that a water leakage condition exists.